

REMARKS

Claims 1-22 are pending in the present application. Claims 1, 14 and 19 are independent claims. Reconsideration in view of the following remarks is kindly requested.

Entry Amendment After Final Rejection

Entry of the amendment is requested under 37 CFR § 1.116 because the amendment: a) place the application in condition for allowance for the reasons discussed herein; b) do not raise any new issues requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; c) do not present any additional claims without canceling the corresponding number of final rejected claims; and d) place the application in better form for appeal, if an appeal is necessary. Entry of the amendment is thus respectfully requested.

Objection to the Specification

The Examiner objected to the specification due to minor informalities. In particular, the Examiner states that the Amendment filed on November 1, 2004 failed to include page 2 which contained the amendments to the specification.

Applicants submit that the filed November 1, 2004 Amendment included a total of 14 pages, including page 2 as indicated in the postcard receipt. Applicants are at a loss on how only page 2 can be missing while the remaining pages were submitted in the U.S. Patent and Trademark Office.

Nonetheless, Applicants re-submitted the amendments to paragraphs [0003] and [0031], as previously submitted in the November 1, 2004 Amendment. Accordingly, it is submitted that

the amendments now obviate the objection. Withdrawal of the objection is respectfully requested.

35 U.S.C. § 102(b) - Garrett rejection

Claims 14-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Garrett, Sr. et al. (hereinafter "Garrett"), USP 4,285,433. This rejection is respectfully traversed.

Applicants submit that Garrett fails to teach or disclose a tape displacement device which separates a protective tape portion from a protected surface of an individual chip, while the individual chip is attached to a chip pad (emphasis added), as recited in claim 14.

The Examiner acknowledges that Garrett fails to disclose "removing a protective tape portion from a protected surface of an individual chip while the individual chip is attached to a chip pad". Yet, the Examiner contends that *intended use* of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art, and cites In re Casey and In re Otto for support. Applicants, however, submit that the Examiner has misconstrued Casey and Otto for the reasons set forth below.

In Otto, the CCPA held a claim to a core member was not further limited by how the core member was used. The CCPA held that how the core member was used was an *intended use* limitation, and not entitled to patentable weight.

Similarly, in Casey, the CCPA held a claim to a taping machine was not further limited by how the taping machine was used. The CCPA held that how the taping machine was used was an *intended use* limitation, and not entitled to patentable weight.

Independent claim 14 is directed to an apparatus "for use in assembling a semiconductor package". Consistent with Otto and Casey, the Examiner is free to ignore this clause when considering patentability.

However, Otto and Casey do not permit the Examiner to ignore the functions performed by the various elements, i.e., the chip positioning device, the tape positioning device, or the tape displacement device of the apparatus of claim 14.

"All words in a claim must be considered in judging patentability of that claim against the prior art." Emphasis added, citing In re Wilson, 165 USPQ 494, 496 (CCPA 1970).

As argued previously, Garrett does not disclose removing a protective tape portion from a protected surface of an individual chip while the individual chip is attached to a chip pad, as recited in claim 14.

Accordingly, Applicants submit that claim 14 and those claims dependent thereon are allowable over the prior art. Withdrawal of this rejection is kindly requested.

35 U.S.C. § 102(b) - Farnworth rejection

Claims 19-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Farnworth et al. (hereinafter "Farnworth"), USP 6,202,292. This rejection is respectfully traversed.

As similarly discussed above with regard to independent claim 14, independent claim 19 is directed to an apparatus "for use in assembling a semiconductor package". Consistent with Otto and Casey, the Examiner is free to ignore this clause when considering patentability.

However, Otto and Casey do not permit the Examiner to ignore the functions performed by the various elements, i.e., the chip positioning device and the tape removal device of the apparatus of claim 19.

"All words in a claim must be considered in judging patentability of that claim against the prior art." Emphasis added, citing In re Wilson, 165 USPQ 494, 496 (CCPA 1970).

As argued previously, Farnworth does not disclose removing a protective tape portion from a protected surface of an individual chip while the individual chip is attached to a chip pad, as recited in claim 19.

Accordingly, Applicants submit that claim 19 and those claims dependent thereon are allowable over the prior art. Withdrawal of this rejection is kindly requested.

Still further, Farnworth fails to disclose or suggest "removing the protective tape portion from the protected surface", as recited in claim 19.

Instead, Farnworth discloses the carrier film 104 covering only a portion of die 102 in valley form on the unprotected surface of die (Fig. 1b), whereas independent claim 19 recites removing the protective tape portion from the protected surface of the chip. As an example embodiment of the present invention, Fig. 7 illustrates the protective tape portion 206 may cover the active surface of chip 204, whereby the protective tape 206 is positioned on top of the chip 204.

Accordingly, Farnworth fails to disclose or suggest a tape removal device for removing the protective tape portion from the protected surface, while the individual chip is attached to a chip pad, as recited in claim 19.

Accordingly, Applicants submit that claim 19 and those claims dependent thereon are allowable over the prior art. Withdrawal of this rejection is respectfully requested.

35 U.S.C. § 102(e) - Kawakami rejection

Claims 1-3, 5-6 and 8-22 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kawakami, USP 2003/0190795. This rejection is respectfully traversed.

From the comments provided by the Examiner on page 11 in the Office Action, it appears that the Patent Office has not received a verified English translation of the Korean priority document (KR 2002-82672 filed on December 23, 2002). However, Applicants submit that a copy of a verified English translation of the Korean counterpart patent application was filed along with the August 8, 2004 Amendment. See copy of post card receipt for Amendment filed August 8, 2004.

Nonetheless, Applicants have provided another copy of the verified English translation of the Korean counterpart patent application (KR 2002-82672) filed on December 23, 2002 which is prior to the filing date of Kawakami.

Accordingly, Applicants submit that Kawakami is not valid prior art under 35 U.S.C. § 102. Withdrawal of this rejection is kindly requested.

35 U.S.C. § 103(a) - Yamada/Huang

Claims 1-6, 8-11 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada et al. (hereinafter "Yamada"), USP 6,297,131 in view of Huang et al. (hereinafter "Huang"), USP 6,650,006. This rejection is respectfully traversed.

The Examiner on page 8 in the Office Action admits that Yamada fails to disclose the process of "attaching an individual chip to a chip pad". The Examiner attempts to overcome the

admitted deficiency of Yamada by arguing that Huang teaches attaching an individual chip to a chip pad.

However, it is submitted that the process of Huang is different than the claimed invention of independent claim 1. Specifically, attaching the individual chip to the chip pad in Huang is performed after the individual chip is formed, rather than during an assembly of the chip, as recited in independent claim 1.

Further, the Yamada process of FIGs. 8-13, on which the Examiner relies, also requires the chip to be attached to a chip pad or substrate after the adhesion is reduced and/or after the tape is removed. Accordingly, even if Yamada and Huang were combinable, which Applicant's do not admit, their combination would teach or suggest one of ordinary skilled in the art to attach a chip to a chip pad or substrate after adhesion is reduced and/or after tape is removed would, in contrast to independent claim 1.

Applicant submits that claim 1 and those claims dependent thereon are allowable over the prior art. Withdrawal of this rejection is kindly requested.

35 U.S.C. § 103 – Yamada/Huang/Oka

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada and Hwang and further in view of Oka, USP 2002/0048904. This rejection is respectfully traversed.

Applicants submit that at least for the reasons as stated above with regard to claim 1, that claim 7 is also allowable over the prior art.

Accordingly, Applicants submit that, for at least the reasons stated above, claim 7 is allowable over the prior art. Withdrawal of this rejection is kindly requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-22 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

John A. Castellano, Reg. No. 35,094

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/DJC:jcp

Attachments:

Copy of postcard receipt filed November 1, 2004

Copy of Verified English Translation of Korean Patent Appl. No. 02-82672